

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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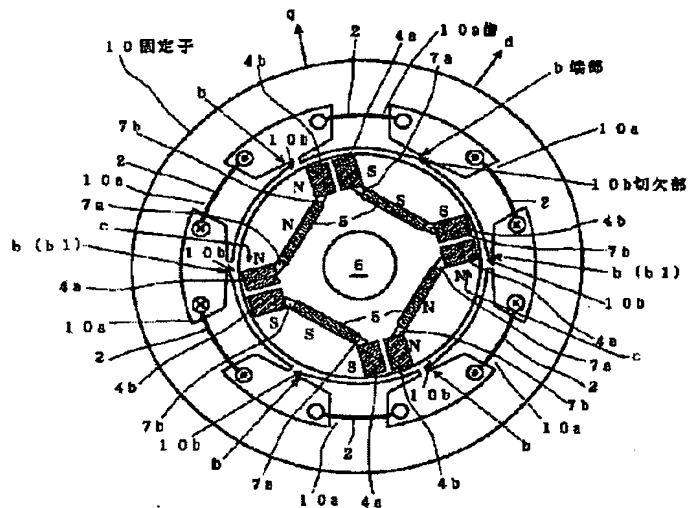
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APPLICANT : FUJITSU GENERAL LTD;

INVENTOR : FUJIOKA TAKUSHI;

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TITLE : PERMANENT-MAGNET MOTOR



ABSTRACT : PROBLEM TO BE SOLVED: To reduce torque fluctuation for the reduction of vibration and noise and increase the average torque for the enhancement of efficiency in a permanent-magnet motor provided with an IPM-type rotor.

SOLUTION: A rotor 3 mounted with a plurality of permanent magnets corresponding to four magnetic poles is placed inside a stator 10 of six-slot structure for generating revolving magnetic fields wherein each tooth 10a is provided with concentrated winding 2 to form a three-phase, four-pole permanent-magnet motor. Of both the ends of each tooth 10a of the stator 10, the end (b) positioned opposite to the end on the side of the direction of rotation (counterclockwise direction) is cut at the inner circumferential side thereof to form a notch 10b there, and the thickness of the end (b) is reduced by the notch 10b. The air gaps at the thinned ends are enlarged as they go in the direction of anti-rotation, as compared with the other areas.

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